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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,683	10/29/2003	Gary L. Heiman	STAN/31	5261

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EXAMINER	
BEFUMO, JENNA LEIGH	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/696,683	HEIMAN, GARY L.	
	Examiner	Art Unit	
	Jenna-Leigh Befumo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) *5-8,13,17-32 and 34* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,9-12,14-16 and 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/046/05,3/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The Amendment submitted on February 4, 2006, has been entered. Therefore, the pending claims are 1 – 34.

Election/Restrictions

2. Applicant's election with traverse of Group I, claims 1 – 4, 9 – 12, 14 – 16, and 33 in the reply filed on February 4, 2006 is acknowledged. The traversal is on the grounds that the species are not distinct because the search for the different groups will overlap. This is not found persuasive because the search for the two groups require a different search because the different products being search comprise mutually exclusive features that are not considered to be obvious variants of each other. Thus, these features would require mutually exclusive searches and would be a burden on the examiner. However, if the applicant provides evidence that the different features are obvious variants of each other, then the restriction would be withdrawn.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 – 3, 9 – 12, 14 – 16, and 33 are rejected under 35 U.S.C. 102(a and e) as being anticipated by Covelli (2003/0092339 A1).

Covelli discloses a woven fabric made from weft (or filling) yarns comprising a polyester bicomponent filament and a spun staple yarn (paragraphs 5 – 8). The spun yarn is preferably made from cotton (paragraph 9). The warp yarns can be made from spun staple fibers such as cotton, polyester, nylon, wool, linen and blends thereof, or filament yarns made from nylon, polyester, spandex, and blends thereof (paragraph 27). Further, the woven fabric can be made from different weave structures with floats such as twill weaves (for example 2/1, 3/1, 2/2, 1/2, 1/3, herringbone, and pointed twills), or satin weaves (paragraph 25). These structures would include fabrics with warp yarns having floats. Thus, claims 1 – 3, 9 – 12, 14 – 16, and 33 are anticipated.

5. Claims 1, 2, 4, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Barbeau et al. (5,299,602).

Barbeau et al. discloses a woven fabric comprising warps made from multifilament aramid yarns and weft (or filling) yarns made from multifilament aramid yarns and spun aramid yarns (column 2, lines 55 – 60). The woven fabric has a twill weave structure (column 3, lines 5 – 7). Specifically, the figure shows a 3/1 twill structure, with the warp yarn having floats. Thus, claims 1, 2, 4, 14, and 16.

6. Claims 1 – 4, 9, 10, 12, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Collier (5,487,936).

Collier discloses a woven fabric comprising warp and weft (or filling) threads where the warp and weft threads have a different composition and at least one of the warp or weft threads is

composed of a multifilament yarn (abstract). One of the yarns in a multifilament yarn and the other yarn is optionally a spun yarn of a different composition such as natural fibers cotton, flax, or wool, or synthetic fibers such as polyester, polyamide, polyacrylic, or polypropylene (column 3, lines 15 – 40). The continuous filament yarn can be made from synthetic fibers such as a polyester, polyamide, polyacrylic, or polypropylene (column 3, lines 21 – 30). Preferably the spun yarn is in the warp direction (column 2, lines 55 – 56). The woven fabric can be woven into a 2x2 twill fabric which has warp floats (column 4, lines 10 – 15). Thus, claims 1 – 4, 9, 10, 12, 14, and 16 are anticipated.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 13 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collier in view of Lovingood (2003/0190853).

The features of Collier have been set forth above. Collier discloses that any weave pattern can be used to make the woven fabric depending on the desired visual effect (column 4, lines 10 – 15). While Collier discloses that 2/2 twill weaves can be used to make the woven fabric, Collier fails to teach using 2/1 twill structures. Loving good is drawn to woven fabrics made from warp and weft yarns of different composition which dye to produce a desired visual pattern (abstract). Lovingood discloses that the woven fabric can be produced with various weave patterns including 2/1 twill and 3/1 twill fabrics (paragraph 29). Therefore, it would have

been obvious to one having ordinary skill in the art to use a 2/1 twill structure as disclosed by Lovingood, to produce a different visual effect in the fabric of Collier since Collier discloses that different weave patterns can be used to create different designs in the fabric. Further, it would have been obvious to one having ordinary skill in the art to choose a 2/1 twill weave pattern, since it has been held to be within the general skill of a worker in the art to select a known material (i.e., weave pattern) on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Therefore, claims 13 and 33 are rejected.

9. Claims 1 – 4, 9, 10, 14 – 16, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heiman in view of Fairchild's Dictionary of Textiles (Tortora, Phyllis. 7th edition. Fairchild Publications, New York. 2003. p 596).

Heiman discloses a woven fabric having warp and weft yarns wherein the warp yarn comprise spun cotton yarns and the filling yarns comprise continuous filament polyester yarns (column 3, lines 43 – 55). However, Heiman fails to teach using a twill pattern with warp floats in the woven fabric. Fairchild's discloses that twill weaves are a basic twill characterized by yarns that float over or under at least two consecutive picks (definition). The smallest repeat for a twill weave is a 2/1 twill structure (definition). Further, the twill weave is used to produce a strong, durable, firm fabric (definition). Thus, it would have been obvious to one having ordinary skill in the art to substitute a 2/1 twill weave for the plain weave structure disclosed by Heiman since twill weaves are a commonly known weave structure which is known to produce a strong, durable fabric. Further, it would have been obvious to one having ordinary skill in the art to choose a 2/1 twill weave pattern, since it has been held to be within the general skill of a worker in the art to select a known material (i.e., weave pattern) on the basis of its suitability for

the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Therefore, claims 1 – 4, 9, 10, 14 – 16, and 33 are rejected.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1 – 4, 9, 10, 14 – 16, and 33 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 21 of U.S. Patent No. 5,495,874 in view of Fairchild's Dictionary of Textiles. US 5,495,874 claims a woven fabric having continuous polyester filament filling yarns and cotton spun warp yarns. However, US 5,495,874 fails to claim a 2/1 twill weave structure. Fairchild's discloses that twill weaves are a basic twill characterized by yarns that float over or under at least two consecutive picks (definition). The smallest repeat for a twill weave is a 2/1 twill structure (definition). Further, the twill weave is used to produce a strong, durable, firm fabric (definition). Thus, it would have been obvious to one having ordinary skill in the art to substitute a 2/1 twill weave for the plain

weave structure disclosed by Heiman since twill weaves are a commonly known weave structure which is known to produce a strong, durable fabric.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jenna-Leigh Befumo
April 17, 2006